

MIAMI-DADE COUNTY, FLORIDA METRO-DADE FLAGLER BUILDING 140 WEST FLAGLER STREET, SUITE 1107 MIAMI, FLORIDA 33130–1563 (305) 375–2902 FAX (305) 372–6339

www.miamidade.GOV/buildingcode

NOTICE OF ACCEPTANCE (NOA)

Lüxbau, LLC. 2400 Centrepark West Dr. Suite No. 150 West Palm Beach, FL 33409

$\mathbf{S}_{\mathsf{COPE}}$

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami–Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami–Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami-Dade County) and/or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION:

Series "Lüxbaum Windows & Doors" 10'0" Outswing Glazed Wood Bi-Fold Doors - L.M.I.

APPROVAL DOCUMENT: Drawing No. **1454**, titled "**Lüxbaum Windows & Doors 10 Ft. Impact Out–Swing Bi–Fold Doors**", sheets 1 through 9 of 9, dated 03/02/10, prepared by W. W. Schaefer Engineering & Consulting, P.A., dated 07/01/10, signed and sealed by Warren W. Schaefer, P. E., bearing the Miami–Dade County Product Control Approval stamp with the Notice of Acceptance number and Approval date by the Miami–Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami–Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami–Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA consists of this page 1, evidence page E-1, as well as approval document mentioned above. The submitted documentation was reviewed by **Jaime D. Gascon, P. E.**





NOA No. 10-0408.15 Expiration Date: August 04, 2015 Approval Date: August 04, 2010

Page 1

Lüxbau, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

- 1. Manufacturer's die drawings and sections.
- 2. Drawing No 1454, titled "Lüxbaum Windows & Doors 10 Ft. Impact Out–Swing Bi–Fold Doors", sheets 1 through 9 of 9, dated 03/02/10, prepared by W. W. Schaefer Engineering & Consulting, P. A., dated 07/01/10, signed and sealed by Warren W. Schaefer, P. E.

B. TESTS

- 1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202–94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202–94
 - 4) Large Missile Impact Test per FBC, TAS 201–94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

along with marked-up drawings and installation diagram of bi-fold doors, prepared by Hurricane Test Laboratory, LLC., Test Reports No. **HTL-0271-0213-08**, dated June 03, July 27 and February 16, 2010, all signed and sealed by Vinu J. Abraham, P. E.

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC–2007, prepared by W. W. Schaefer Engineering & Consulting, P. A., dated March 24, 2010, signed and sealed by Warren W. Schaefer, P. E.

Complies with ASTM E1300-04

D. QUALITY ASSURANCE

1. Miami–Dade Building Code Compliance Office (BCCO).

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **09–0312.03** issued to E.I. DuPont DeNemours & Co., Inc. for their "**DuPont Sentry Glass® Interlayer**" dated 05/13/09, expiring on 01/14/12.

E. STATEMENTS

- 1. Statement letter of no financial interest, conformance and compliance with the FBC–2007, dated April 30, 2010, signed and sealed by Warren W. Schaefer, P. E.
- 2. Laboratory compliance letter for Test Reports No. **HTL-0271-0213-08**, issued by Hurricane Test Laboratory, LLC., dated March 11, 2010, all signed and sealed by Vinu J. Abraham, P. E.
- 3. Proposal No. **04–0571** issued by BCCO, dated February 02, 2005, signed by Ishaq Chanda, P. E.

F. OTHERS

1. None.

Jaime D. Gascon, P. E. Chief, Product Control Division

NOA No. 10-0408.15

Expiration Date: August 04, 2015 Approval Date: August 04, 2010

GENERAL NOTES: THESE DOOR SYSTEMS HAVE BEEN TESTED. ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE. SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S). 2. OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO 3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & SHALL NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO. 4. THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED & PROPOSED FOR WATER, AIR, FORCED ENTRY, IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH THE FLORIDA BUILDING CODE PROTOCALS TAS-201, 202 & 203 FOR LARGE MISSILE IMPACT DOORS. THESE DOOR SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH AND MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ). IMPACT SHUTTERS ARE NOT REQUIRED WITH THESE DOORS. ALL ANCHORS SECURING DOOR FRAME TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD. 8. DETERMINE THE POSITIVE & NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, A DIRECTIONALITY FACTOR OF Kd = 0.85 MAY BE APPLIED PER THE ASCE-7 STANDARD.

WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, A DIRECTIONALITY FACTOR OF Kd = 0.85 MAY BE APPLIED PER THE ASCE-7 STANDARD.

9. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE CERTIFICATION OF THIS PRODUCT. WIND LOAD DURATION FACTOR Cd = 1.6 WAS USED FOR WOOD SCREW ANALYSIS ONLY.

10. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR

MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE CHAPTER 20.

11. All WOOD MEMBERS OF DOORS THAT MAY POSSIBLY COME INTO CONTACT WITH MASONRY OR CONCRETE SUBSTRATES, ARE SUBJECT TO MOISTURE &/OR ARE SUBJECT TO THE OUTSIDE ENVIRONMENT SHALL BE OF AN APPROVED DURABLE SPECIES OR BE TREATED IN AN APPROVED METHOD WITH AN APPROVED PRESERVATIVE PER FBC SECTION 2326.

LOCK ST	RIKE				
REQUIREMENTS					
SIDE OF ACTIVE SWING PANEL					
PANEL HEIGHT	QUANTITY PER PANEL				
108" AND UP	7				
LESS THAN 108"	6				
TOP & BOTTOM OF ALL PANELS					
PANEL WIDTH	QUANTITY PER PANEL				
OVER 33"	4				
33" & LESS	3				

HINGE REQU	IREMENTS			
PANEL HEIGHT	QUANTITY PER PANEL			
OVER 91"	4			
91" & LESS	3			
HINGE LOCATIONS ARE APROXIMATELY 8" FROM TOP & BOTTOM OF DOOR FRAME TO HINGE CENTER				
AND EQUALLY SPACED BETWEEN.				

PANEL HEIGHT DIMENSIONS ARE APPROXIMATELY 8" LESS THAN THE FRAME HEIGHT DIMENSION CONDITIONS SHOWN IN THESE ELEVATIONS ARE THE MAJORITY OF THOSE USED. OTHER CONDITIONS OF FOLDING & SWING PANELS APPLY PROVIDING THEY ARE WITHIN THE SCOPE OF THE DETAILS WITHIN THIS DRAWING.

WHEN FRAME HEIGHT

EXCEEDS 96", ADDITIONAL

ANCHOR IS REQ'D EACH

SIDE OF MEETING/HINGE

-CMU IS NOT APPLICABLE AT

HEAD & SILL

MAXIMUM PANEL WIDTH				
ACTIVE SWING PANEL	37 1/2"			
INACTIVE SWING PANEL	37"			
FOLDING PANEL	37 3/16"			
ACTIVE CORNER SWING PANEL	38 3/16"			
INACTIVE CORNER SWING PANEL	38 13/16"			

CORNER CONSTRUCTION:

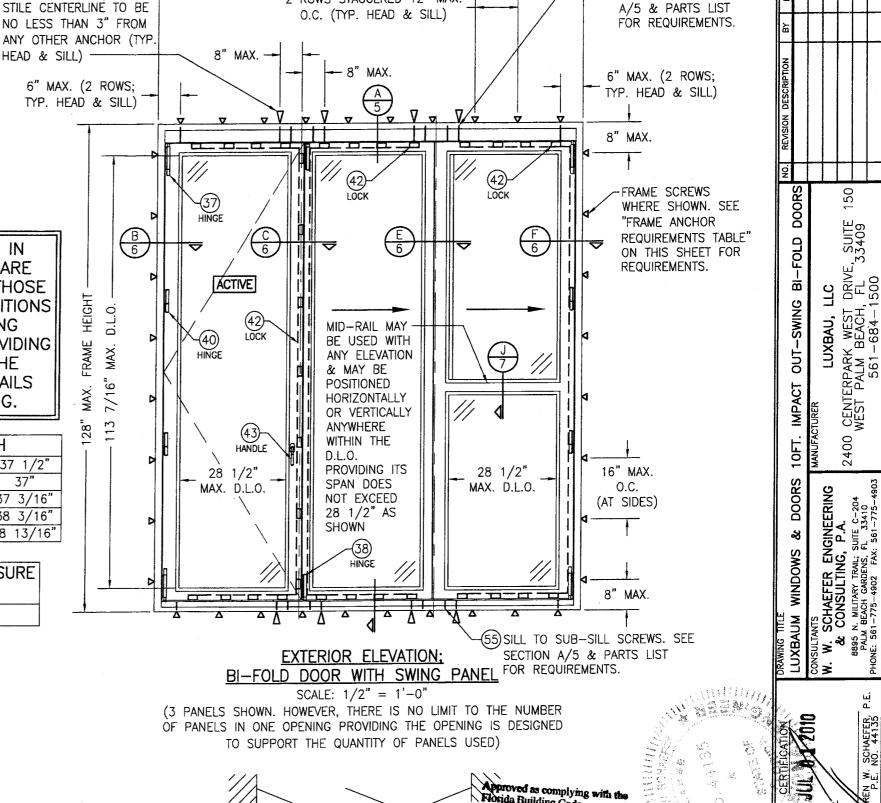
FRAME; VERTICAL MEMBERS ARE COPED, BUTTED & JOINED TO THE HORIZONTAL MEMBERS WITH THREE(3) Ø1/2" X 2" WOOD DOWELS PER CORNER. CORNERS ARE SEALED/GLUED WITH WOOD GLUE.

PANEL: HORIZONTAL MEMBERS ARE COPED, BUTTED & JOINED TO THE VERTICAL MEMBERS WITH TWO(2) Ø1/2" X 2" & ONE(1) Ø5/8" X 2" WOOD DOWELS PER CORNER. CORNERS ARE SEALED/GLUED WITH WOOD GLUE.

ALLOWABLE DESIGN PRESSURE
(ALL CONDITIONS)
+65/-70 PSF

FRAME ANCHOR REQUIREMENTS TABLE				
OPENING TYPE (SUBSTRATE)	FRAME TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.	
FRAME SCREWS				
MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 12 SMS OR WOOD SCREW	1 1/4"	3/4"	
MIN. 16 GA. 33 KSI METAL STUD	NO. 12 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"	
MIN. 1/8" THK A36 STEEL	NO. 12 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"	
MIN. 1/8" THK 6063-T5 ALUM.	NO. 12 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"	
MIN. C-90 CMU	(1) 1/4" CONCRETE SCREW	1 1/4"	2" -	
MIN. 2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 3/4"	2"	

(1) CONCRETE SCREWS SHALL BE ELCO ULTRACONS OR CRETE-FLEX, ITW RAMSET/RED HEAD TAPCONS OR HILTI KWIK-CON II (HARDENED STEEL OR S.S.).



OVERALL MAXIMUM FRAME WIDTH VARIES WITH THE OUANTITIES OF PANELS USED IN THE DOOR UNIT

2 ROWS STAGGERED 12" MAX.

W.W.S.

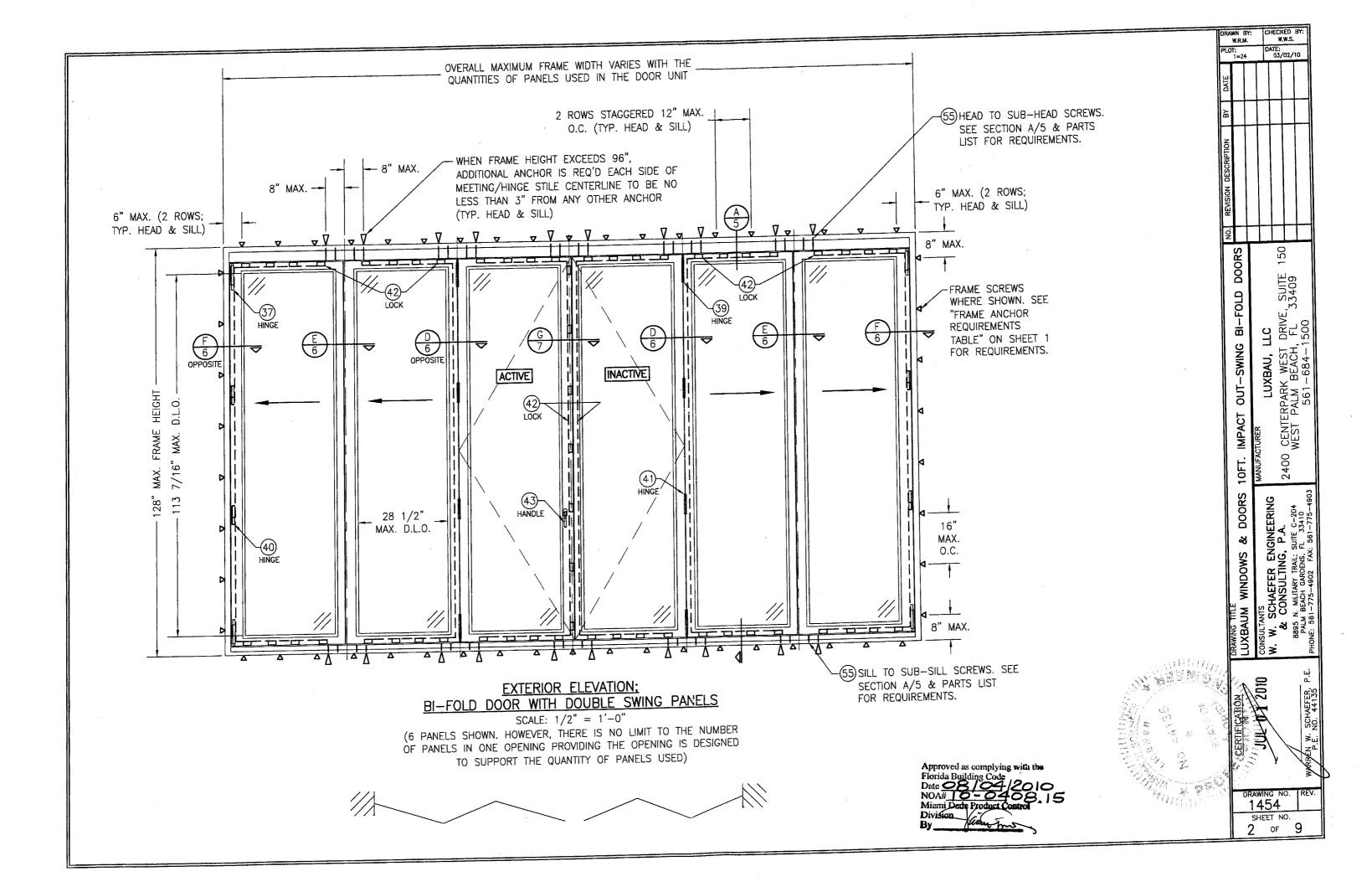
ATE: 03/02/10

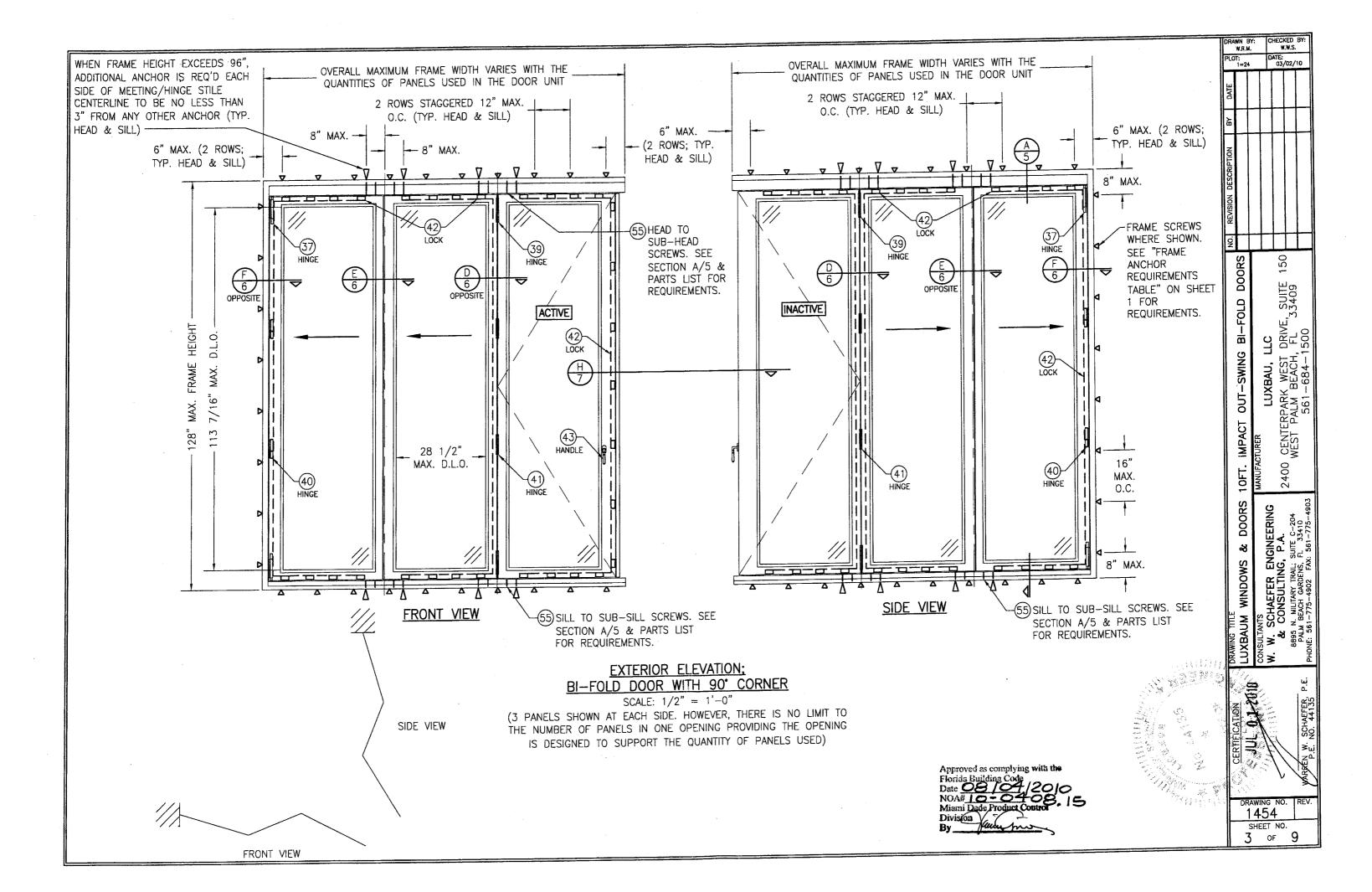
1454 SHEET NO.

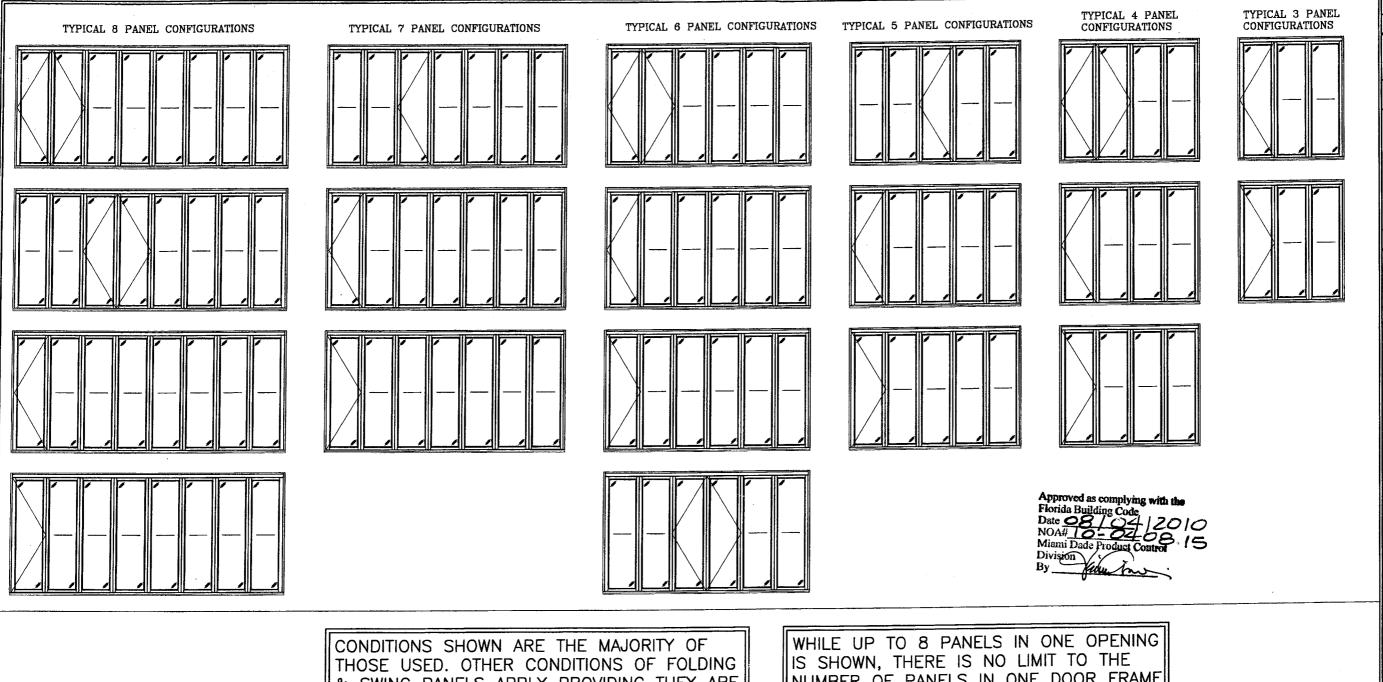
OF

-(55) HEAD TO SUB-HEAD

SCREWS. SEE SECTION



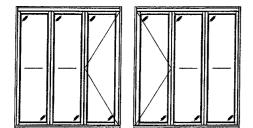




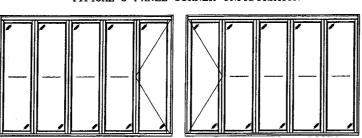
& SWING PANELS APPLY PROVIDING THEY ARE WITHIN THE SCOPE OF THE DETAILS WITHIN THIS DRAWING.

NUMBER OF PANELS IN ONE DOOR FRAME OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT THE LOADS TRANSFERRED FROM THE DOOR SYSTEM

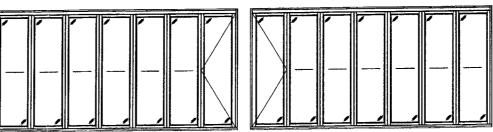
TYPICAL 3 PANEL CORNER CONFIGURATION



TYPICAL 5 PANEL CORNER ONFIGURATION



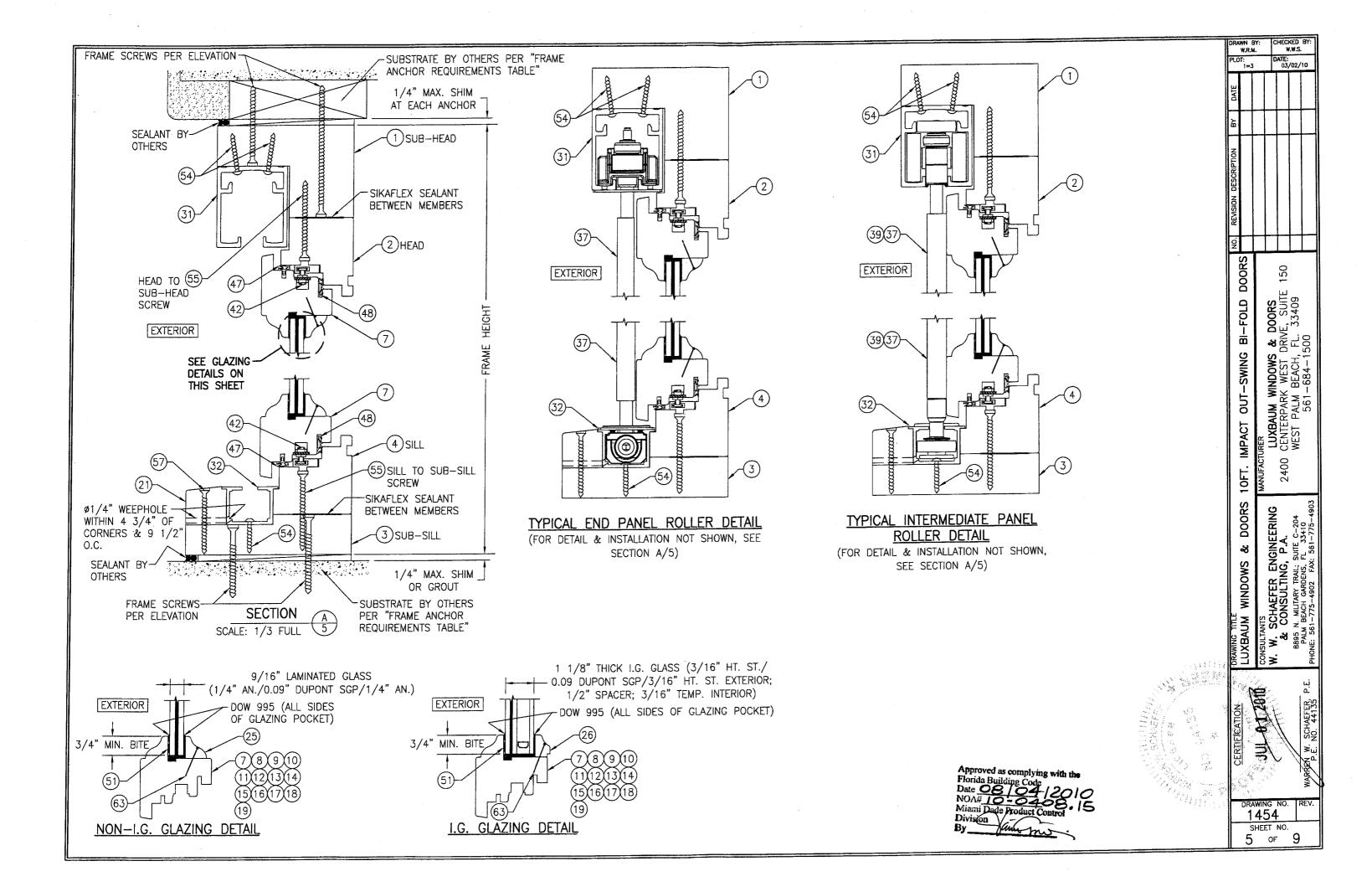
TYPICAL 7 PANEL CORNER CONFIGURATION

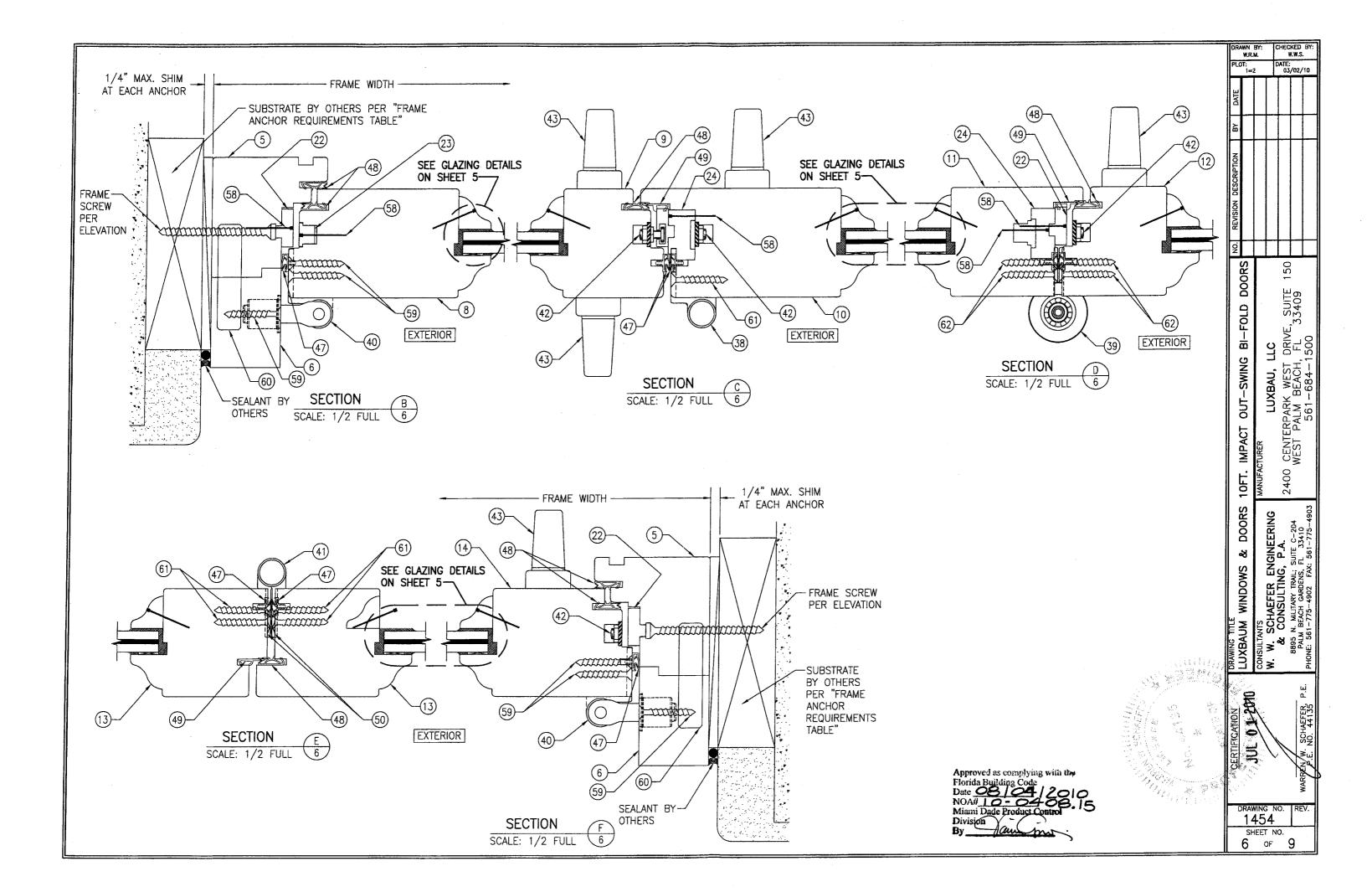


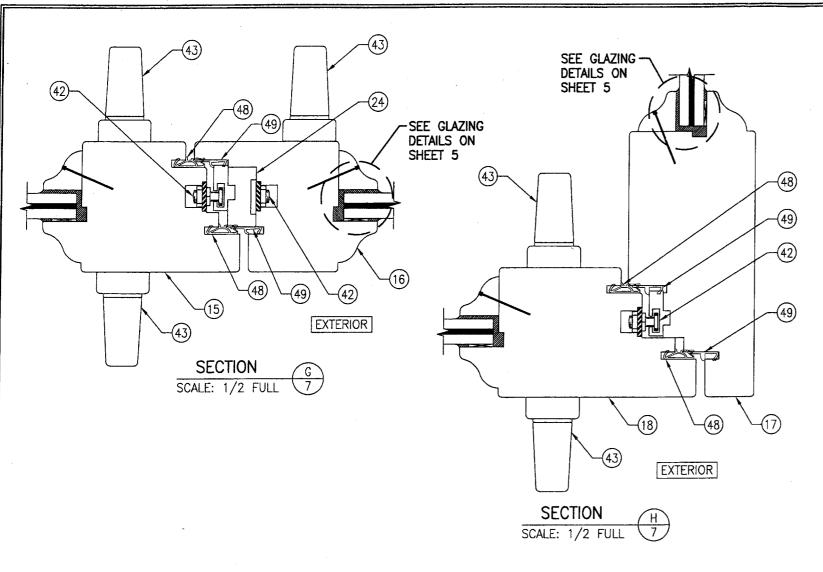
PLOT: 1=24 OATE: 03/02/10 BI-FOLD OUT-SWING

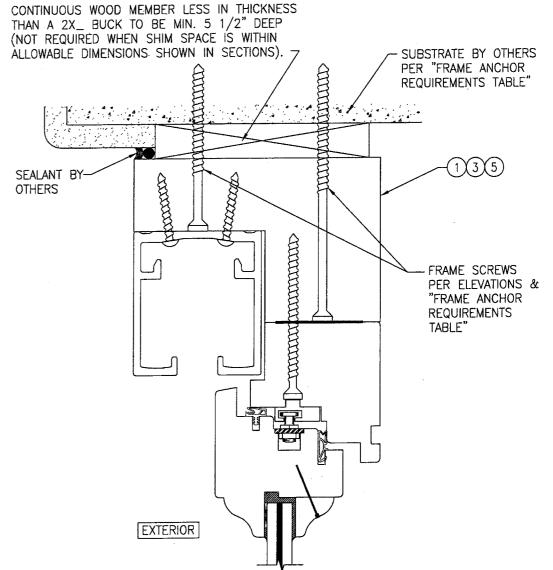
1454 SHEET NO.

4 of



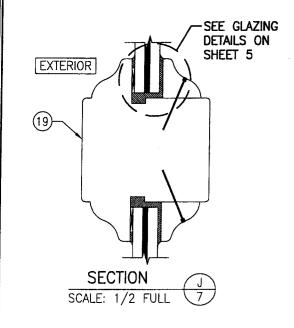




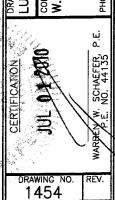


OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER

(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED SIMILAR) (FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



Approved as complying with the Florida Building Code
Date 6 / 04 / 2010
NOA# 10 - 04 / 2010
Miami Dade Product Control
Division



SHEET NO.

PLOT: 1=2

DOORS

BI-FOLD

OUT-SWING

IMPACT

10FT.

150

DRIVE, SUITE FL 33409 1500

CENTERPARK WEST I WEST PALM BEACH, 561-684-1

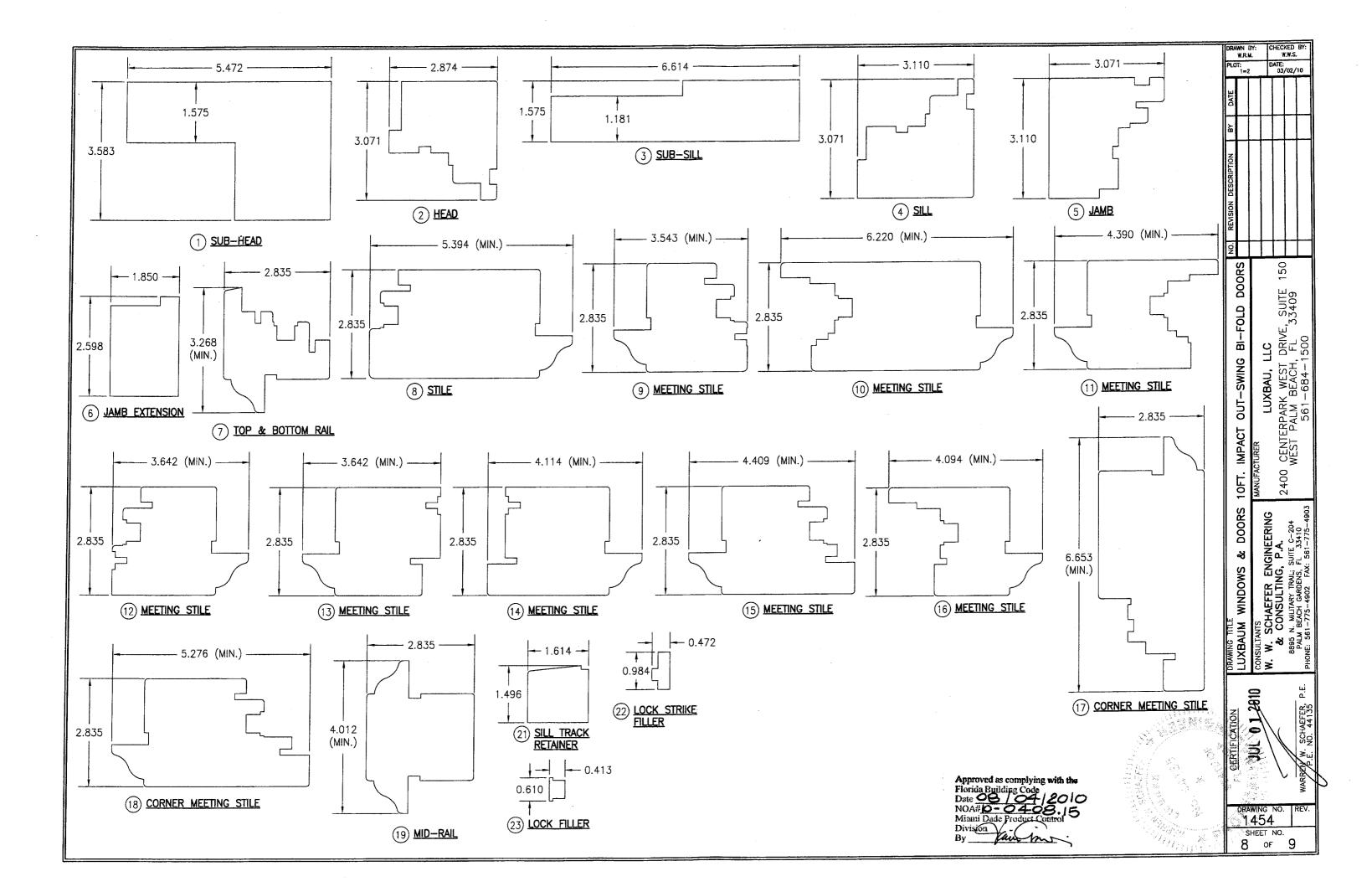
2400

SCHAEFER ENGINEERING CONSULTING, P.A.

LLC

LUXBAU,

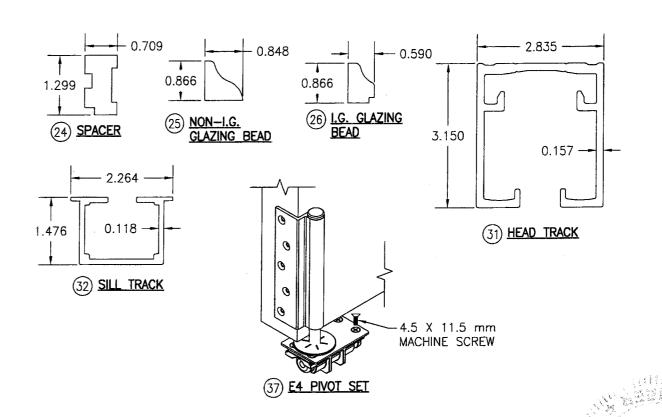
DATE: 03/02/10



ITEM	# ITEM DESCRIPTION	MANUFACTURER/NOTES
	PARTS	
. 1	SUB-HEAD	WOOD
2	HEAD	WOOD
3	SUB-SILL	WOOD
4	SILL	WOOD
5	JAMB	WOOD
6	JAMB EXTENSION	WOOD
7	TOP & BOTTOM RAIL	WOOD
8	STILE	WOOD
9	MEETING STILE	WOOD
10	MEETING STILE	WOOD
11	MEETING STILE	WOOD
- 12	MEETING STILE	WOOD
13	MEETING STILE	WOOD
14	MEETING STILE	WOOD
15	MEETING STILE	WOOD
16	MEETING STILE	WOOD
17	CORNER MEETING STILE	WOOD
18	CORNER MEETING STILE	WOOD
19	MID-RAIL	WOOD .
21	SILL TRACK RETAINER	WOOD
22	LOCK STRIKE FILLER	WOOD
23	LOCK FILLER	WOOD
24	SPACER	WOOD
25	NON-I.G. GLAZING BEAD	WOOD
26	I.G. GLAZING BEAD	WOOD
31	HEAD TRACK	6063-T5 ALUMINUM
32	SILL TRACK	6063-T5 ALUMINUM
	HARDWARE	
37	E4 PIVOT SET	CENTOR AUSTRALIA
38	E4 OFFSET CARRIER SET	CENTOR AUSTRALIA
39	E4 INTERMEDIATE SET	CENTOR AUSTRALIA
40	E4 WALL PIVOT SET	CENTOR AUSTRALIA
41	E4 HINGE SET	CENTOR AUSTRALIA
42	MULTI-POINT LOCK	SIEGENIA, 3/4M5
43	HANDLE	AS REQUIRED TO OPERATE LOCK SYSTEM
	SEALS & SEALANTS	The state of the s
47	WEATHERSTRIP	DEVENTER, S 6577A
48	WEATHERSTRIP	DEVENTER, SV-12
49	WEATHERSTRIP	DEVENTER, S 6544
50	WEATHERSTRIP	KILLIAN HARDWARE COMPANY, V SHAPED
51	GLAZING SHIM	1/16" X 9/16" NEOPRENE
		WITHIN 1" FROM CORNERS 8" O.C.

	ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES				
1		FASTENERS					
7	54	NO. 10 X 1 1/2" S.S. P.H. WOOD SCREW	WITHIN 4 1/2", 12 1/2" 20 1/2" FROM				
1			CORNERS & 16" MAX. O.C.				
7	55	NO. 12 X 3" S.S. WOOD SCREW	WITHIN 6" FROM CORNERS & A TOTAL OF 4				
1			CLUSTERED 3" & 6" FROM EACH				
1			MEETING STILE CENTERLINE				
1	57	NO. 10 X 2 1/2" S.S. WOOD SCREW	WITHIN 3" FROM CORNERS & 16" MAX. O.C.				
1	58	23 GA. X 1" FINISH NAIL	WITHIN 3" FROM CORNERS & 16" MAX. O.C.				
1	59	NO 10 X 1 1/2" S.S. WOOD SCREW	5 PER HINGE INTO PANEL				
1			2 PER HINGE INTO JAMB				
1	60	ø5/8" X 2 3/4" WOOD DOWEL	WITHIN 5 1/2" FROM CORNERS &				
1			11 1/4" MAX. O.C.				
1	61	NO 10 X 1 1/2" S.S. WOOD SCREW	5 PER HINGE INTO PANEL				
1	62	NO 10 X 1 1/2" S.S. WOOD SCREW	5 PER HINGE INTO PANEL				
	63	63 23 GA. X 1 1/4" FINISH NAIL WITHIN 2" FROM CORNERS & 4" N					

NOTE: WOOD USED IN TESTING WAS MERBAU MAHOGANY WITH A SPECIFIC GRAVITY OF G = 0.62 AND A MODULUS OF ELASTICITY OF E = 2,600,000 PSI. OTHER WOOD SPECIES APPLICABLE FOR USE WITH THIS PRODUCT ARE THOSE WITH A SPECIFIC GRAVITY OF 0.62 AND MODULUS OF ELASTICITY OF 2,600,000 PSI OR GREATER. ALL WOOD IS MINIMUM GRADE 2 MILLED BY LUXBAU, LLC TO SELECT.



Approved as complying with the Florida Building Code Date OS /04 | 2010 NOA# 10-04-08 15 Miami Dade Product Control Division By

	DRAWN W.R	BY: .M.	': CHECKED BY W.W.S. DATE:			BY:	
		2	\sqcup	T	03/	02/	10
	DATE						
	β						
	NO. REVISION DESCRIPTION						
]			Ľ				
	RAWING TITLE LUXBAUM WINDOWS & DOORS 10FT. IMPACT OUT-SWING BI-FOLD DOORS	MANUFACTURER	LUXBAU. LLC		2400 CENIERPARK WES! DRIVE, SUITE 1.	WEST PALM BEACH, FL 33409	561-684-1500
	DRAWING TITLE LUXBAUM WINDOWS & DOORS	CONSULTANTS	W. W. SCHAEFER ENGINEERING	& CONSULTING P.A.	AROF N MILITADY TONII . CHIEC O	PALM BEACH GARDENS, FL 33410	PHONE: 561-775-4902 FAX: 561-775-4903
	ATION			ŀ		HAFFEE	. 44135

JUL O ZUID WARPEN W. SCHAFFER P.E.

DRAWING NO. REV 1454 SHEET NO. 9 OF 9